

REMARKS

A telephonic interview was held with Examiner Blount. The Examiner's consideration and courtesy are greatly appreciated.

Claims 1-6, 10-11, 19-20, and 22 were rejected under 35 USC 112 because of an antecedence problem in claim 1. Claim 1 is amended to overcome the rejection.

Claims 1-6, 10-11, and 19-20 were rejected under 35 USC 103 as being unpatentable over Sakamoto et al, US Patent 6,075,767. Applicant respectfully traverses.

The Examiner identifies the asserted correspondences as

- 1) switch fabric -- 2
- 2) controller -- 4
- 3) first I/O module -- 1-1 in FIG. 1
- 4) second I/O module -- 1-2
- 5) decision module -- 3.

Based on these correspondences and with reference to Sakamoto et al FIG. 4, which contains all of the mentioned elements, it is clear that the first I/O and the second I/O module are connected to the decision module, and the decision module is connected to the switch fabric. Controller 4 controls the operation of the entire arrangement. More particularly, controller 4 is responsive to directives from a network management communication line 8, and executes the directive through a control path 6 that extends from controller 4 to decision logic 3, to the I/O modules (line interface cards such as 1-1), and to the switch fabric 2. This path determines whether module 1-1 or module 1-2 is coupled to the switch fabric.

The structure specified by applicant's claim 1 includes a decision logic module that is adapted to develop signals in response to a stimulus that is taken from a set of stimuli. The set includes user specified directives, state condition information of the service line (i.e. the line connected to second I/O module), and state condition information of the protection line. Since, in contradistinction, the Sakamoto et al decision logic (3) only in response to controller 4, and does not develop signals in response to a stimulus that is taken from a set including user-specified directives, state condition information of the service line that is connected to module 1-1, and to state condition information of the protection line that is connected to module 1-2, the correspondence fails.

The Examiner might assert that the decision logic 3 is responsive to controller 4, and controller 4 is, in turn, responsive to a signal from network management element 5. However, there is no teaching that network management 5 provides “user-specified directives.” In fact the text at col. 1, lines 40 et seq. states:

The control part 4 is linked with a network management function 5 via a communication line for network management 8 to transmit in response to an order from the network management function 5 supervision/defect information to the network function 5 which is a higher level device of the control part 4.

This passage suggests that the information provided by element 5 is NOT “user-specified directives” but, rather, resident (“supervision”) and network behavior (“defect”) information. Consequently, it is respectfully submitted that the decision logic defined in claim 1 is significantly different from the Sakamoto et al decision logic cited by the Examiner and, therefore, claim 1 is not obvious in view of Sakamoto et al.

It may be noted that the fact that the decision logic is adapted to respond to different stimuli is buttressed by claims 19 and 20, discussed below.

Furthermore, the logic module defined in claim 1 is capable of responding to state information from the first I/O module and from the second I/O module, but the Sakamoto et al logic module is not so adapted. Therefore, again, the decision logic of applicant’s claim 1 is patentably different from that of Sakamoto et al.

Further still, claim 1 specifies placing one line in a standby state and the other line in an active state. At page 4 of the Office action (3 lines from the bottom of the page) the Examiner admits that Sakamoto et al do not teach controlling modules to go into active or standby modes, which means that they do not teach placing one line in a standby state and the other line in an active state.

Based on the above, it is respectfully submitted that claim 1 is not obvious in view of Sakamoto et al, and neither are dependent claims 2-6, 10-11, and 19-20. Moreover, it is believed that at least some of the dependent claims contain a limitation that confers patentability.

As for claim 2, which specifies that the decision logic module is implemented within the controller, the Examiner asserts that the controller and the decision logic “are integral with each other.” Applicant respectfully traverses. Perhaps it is not understood what the Examiner means by “integral with each other,” but it is quite clear that the

decision logic module is an electronic circuit card, labeled in FIG. 4 as “SELECTOR CARD,” and element 4 is a **separate** electronic circuit labeled as “CONTROL PART.” None of the drawings and no text passages suggest that the selector card is implemented within the control part.

As for claim 3, which specifies a different, specific, location for the decision logic, the Examiner asserts that the decision logic module of Sakamoto et al is “spread throughout elements 1-1, 1-2 and 3. Applicant respectfully disagrees and traverses the rejection. There are only three signal lines between element 3 and element 1-1. One is the data that feeds multiplexer 9. The second appears to go out of element 15-1, and pass through element 3 on its way to element 4 (*strangely, with no connection to any circuit within element 3*). The last is a control signal from register 27 in selector card 3 to ATM layer processing block 21-1. This third signal, which is the only one that can be considered as part of any “decision logic module,” merely controls the ATM layer processing block 21-1. There is nothing else within element 1-1 that relates to anything that can be considered “decision logic module.” The Examiner points to element 22-1, but this element has no connection to element 3 whatsoever, so it cannot be considered to be part of element 3.

As for claim 4, the “report information of defect” is clearly not a **user** directive and, therefore, it is believed that claim 4 is not obvious in view of Sakamoto et al.

As for claim 5, which is amended to simply make it clearer, there is no teaching in Sakamoto et al of *degraded* conditions, as distinguished from *failed* condition. Therefore, it is respectfully submitted that claim 5 is not obvious in view of Sakamoto et al

As for claims 19 and 20, which specify a hierarchical order of stimuli, the Examiner asserts that such an order is an obvious variation of report information defects. Respectfully, applicant disagrees. Sakamoto et al do not have the set of stimuli specified in claims 19 and 20, and moreover, Sakamoto et al do not teach the notion of having an order. It is quite likely that the responsiveness of element 5 is on a first come - first serve basis. Furthermore, there is simply no notion of rejecting a stimulus, as specified in claim 19. As for claim 20, there is no notion in Sakamoto et al of user-specified directive, and there is certainly no notion of “last-provided user-specified directive.

Claims 23-24 were rejected under 35 USC 103 as being unpatentable over Sakamoto et al in view of Tounai et al, US Patent 5,870,382. Applicant respectfully traverses. The Examiner asserts that Sakamoto et al teach all of the limitations of claim 23, except for the step of controlling recited in the claim.

In the course of the interview the undersigned pointed to the fact that Sakamoto et al do not have a first and second register. Shortly after the interview Examiner Blount kindly called to suggest that the Tounai et al reference at col. 8, lines 23 et seq. there is a teaching of K1 and K2 and that he considers those to be the two registers that can be incorporated into the teachings of Sakamoto et al. The following treats the rejection as modified in the interview.

Applicant respectfully traverses the rejection.

Claim 23 includes a step of “determining, based on a user-specified directive, whether to accept or reject said stimulus.” First, as indicated above, no action based on **user-specified directive** is taught by Sakamoto et al, and the Examiner does not even assert that there is such teaching or suggestion. Second, the notion of having a received stimulus that is rejected is simply not contemplated by Sakamoto et al. Third, claim 23 also includes a step of “comparing a first number that corresponds to bits in said first register to a second number that corresponds to bits in said second register.” Only one register exists in Sakamoto et al. As for the K1 and K2 bytes of Tounai et al, the types of information that these bytes contain are shown in FIGS. 2 and 3 of the Tounai et al reference, and it is quite clear from a perusal of these FIGS. that even Tounai et al do not consider the information of byte K1 or in byte K2 as information that is to be considered. They also do not consider the information in bytes K1 and K2 as information that is to be compared to each other. Such comparison is meaningless. Since the teachings of Tounai et al are completely different from the claim 23 limitation, which specifies “comparing a first number that corresponds to bits in said first register to a second number that corresponds to bits in said second register,” we do not even reach the question of whether (a) it would make any sense to introduce bytes K1 and K2 into Sakamoto et al, and (b) there is any motivation for doing so. Therefore, it is respectfully submitted that claim 23 is not obvious in view of Sakamoto et al in combination with Tounai et al.

With respect to claim 24, the Examiner only states: "note that bytes (which have 8 bits) are taught in col. 4, lines 33+ of Tounai et al." Respectfully, this ignores the limitation of claim 24, which specifies that the "first register and said second register are 8 bits each." It is noted that the Sakamoto et al reference's only identified register, register 27, has a number of stages (outputs) that is equal to the number of line interface cards 15, of which FIG. 2 shows to be n . There is no teaching or suggestion that n is precisely 8. Thus, it is respectfully submitted that claim 24 is not obvious in view of Sakamoto et al in view of Tounai et al, even independently of the fact that claim 24 is dependent on claim 23.

New claim 29 is introduced and, it is respectfully submitted that claim 29 is not obvious in view of the cited prior art.

Claims 26-28 are allowed, and claims 22 and 25 are now believed to be allowable.

In view of the above amendments and remarks, applicant respectfully submits that all of the Examiner's rejections have been overcome. Reconsideration and allowance of the outstanding claims are respectfully solicited.

Dated: 8/26/04

Respectfully,
Yung-Ching Sha

By 

Henry T. Brendzel

Reg. No. 26,844

Phone (973) 467-2025

Fax (973) 467-6589

email brendzel@comcast.net